

2) The compelling science goals you foresee for RHIC A+A, p+p, and d+A collisions that can only be carried out with additional upgrades (or replacements) of detector subsystems or machine capabilities (e.g., further luminosity or diamond size improvements). For each such goal, provide some explanation of why RHIC is the appropriate facility (e.g., in competition with LHC or FAIR) to pursue that science, and preferably some simulations that demonstrate the need for new detector or machine capabilities to address the compelling questions. If the pursuit of some science goals is conditional on results to be obtained over the next several years, try to outline the decision points you foresee for deciding future paths.

4) Any plans or interest your Collaboration has in adapting your detector or detector subsystems (or detector R&D) to study electron-nucleon and electron-ion collisions with an eventual eRHIC upgrade. This is relevant only near the end of the decade addressed here, but will be important for planning purposes. (We may well be forced by financial or environmental considerations, even for a first MeRHIC stage, to consider options in which acceleration of the electron beam is carried out around the RHIC tunnel, requiring some scheme for getting an electron beamline through or around PHENIX and STAR. So it is worth considering if there is some way you could make use of the e-p and e-A collisions if we provided them.)